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EXAMINER

DAILEY, THOMAS J

ART UNIT

PAPER NUMBER

2152

NOTIFICATION DATE

DELIVERY MODE

06/02/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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DETAILED ACTION

1. Claims 2, 18 and 35 were cancelled by the amendment filed on March 6, 2008.
2. Claims 1, 3-17, 19-24, 34, and 36-42 are pending.
3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 6, 2008 has been entered.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 3-17, 19-24, 34, and 36-42 have been considered but are moot in view of the new ground(s) of rejection.

Specification

5. The amendment filed March 6, 2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Claims 1, 10, 17 and 34 substantially recite, "the abnormality determination part configured to determine the type of the abnormality as one of:

a first type that cannot be eliminated by a user of the electronic apparatus, a *second type* that can be eliminated by the user of the electronic apparatus, and a *third type* that corresponds to a predetermined function in which the abnormality is detected” (e.g. claim 1, lines 5-11). The applicant has neither indicated where this added limitation is supported by the original disclosure nor could the examiner find support in the specification for such limitations. Furthermore, the amended claims are not enabled by the specification as outlined by the U.S.C. 112 first paragraph rejections below.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first and second paragraphs of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 3-17, 19-24, 34, and 36-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
8. Claims 1, 10, 17 and 34 substantially recite, “the abnormality determination part configured to determine the type of the abnormality as one of: *a first type* that

cannot be eliminated by a user of the electronic apparatus, a *second type* that can be eliminated by the user of the electronic apparatus, and a *third type* that corresponds to a predetermined function in which the abnormality is detected" (e.g. claim 1, lines 5-11, emphasis added). Given the current form of the claim, one of ordinary skill in the art cannot make and use the invention because the specification provides no support for "a third type [of abnormality] that corresponds to a predetermined function in which the abnormality is detected." Moreover, the claimed invention cannot be made (i.e. it is not feasible) due to fact that while the abnormality type determination part determines an abnormality to be of one type (see claim 1, lines 4-6), the examiner can clearly see that an abnormality can be of multiple types giving the definition of the third type. That is to say, for example, a particular abnormality is one that cannot be eliminated by a user (the first type, claim 1, line 7), but that very same abnormality would also correspond to a predetermined function (i.e. whatever function brought about the abnormality). Thus that particular abnormality cannot be determined to be one of the three types of recited abnormalities, but multiple types.

9. Claims 1, 3-17, 19-24, 34, and 36-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claims 1, 10, 17 and 34 substantially recite, “the abnormality determination part configured to determine the type of the abnormality as one of: a *first type* that cannot be eliminated by a user of the electronic apparatus, a *second type* that can be eliminated by the user of the electronic apparatus, and a *third type* that corresponds to a predetermined function in which the abnormality is detected” (e.g. claim 1, lines 5-11, emphasis added). The claimed invention is indefinite due to fact that while the abnormality type determination part determines an abnormality to be of one type (see claim 1, lines 4-6), the examiner can clearly see that an abnormality can be of multiple types giving the definition of the third type. That is to say, for example, a particular abnormality is one that cannot be eliminated by a user (the first type, claim 1, line 7), but that very same abnormality would also correspond to a predetermined function (i.e. whatever function brought about the abnormality). Thus that particular abnormality cannot be determined to be one of the three types of recited abnormalities, but multiple types.

11. Claims 3, 19, and 36, substantially recite, “an abnormality history writing part configured to write a history of the abnormality to said non-volatile storage part when the type of the abnormality determined by the abnormality type determination part represents an abnormality of a fourth type that requires only history saving, wherein the abnormality type determination part is further configured to determine the type of the abnormality as the fourth type that

requires only history saving.” As claims 3, 19, and 36, depend from claims 1, 17, and 34 respectively, and those claims have recited that the abnormality is determined to be of one of three types, it is unclear how that same abnormality can be determined to be of a fourth type as well.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1, 3-6, 8-13, 15-17, 19-24, 34, 36-39 and 41-42 rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagawa (US Pat. 7,148,979) and further in view of Schroath et al (US Pat. 6,973,597), hereafter “Schroath.”.

14. As to claim 1, Yanagawa discloses an electronic apparatus, comprising:

an abnormality detector configured to detect an abnormality when the abnormality occurs in the electronic apparatus (column 6, lines 54-53);

an abnormality type determination part configured to determine a type of the abnormality detected by said abnormality detector (column 6, lines 54-63 and column 7, lines 18-24 shows example abnormalities that can be determined), the

abnormality type determination part configured to determine the type of abnormality as one of:

a first type that cannot be eliminated by a user of the electronic apparatus (column 7, lines 35-43),

a second type that can be eliminated by the user of the electronic apparatus (column 7, lines 18-28), and

a third type that corresponds to a predetermined function in which the abnormality is detected (column 7, lines 18-43);

an abnormality notification part configured to inform an external apparatus of the abnormality when the type of the abnormality determined by said abnormality type determination part is of the first type, and to inform the external apparatus of the abnormality when the type of abnormality is a repeat occurrence of the second type; and (column 7, lines 50-59 where the printer service depot computer reads on the external apparatus); and

an abnormality display part configured to display, when the type of the abnormality determined by said abnormality type determination part is of the third type, that the abnormality is occurring only when a user request to use the predetermined function is received (column 7, lines 18-28, a request is made to print a document which inherently entails other request such as feeding paper, printing ink to paper etc., and if one of these requests fails a message is displayed to inform the user of such (e.g. "OUT OF INK)).

But, Yanagawa does not disclose that the abnormality notification part *automatically* informs the external apparatus. Rather in Yanagawa, the operator is given a choice as to whether to inform the external apparatus or not (column 7, lines 50-59 and Fig. 6, label S110).

However, Schroath discloses an abnormality notification part configured to automatically inform an external apparatus of an abnormality (column 5, lines 49-52), thus bypassing the need for operator consent before external notification of any abnormality.

Because both Yanagawa and Schroath disclose methods of detecting and notifications of abnormalities, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute Schroath automatic notification method for Yanagawa's notification with operator consent in order to achieve the predictable result of notifying an external apparatus of an abnormality (which both teachings disclose) so as to eliminate an extraneous step (the pause for operator consent) and decrease the demands placed on the operator.

15. As to claim 10, Yanagawa discloses a remote management system remotely managing a plurality of electronic apparatuses by a management apparatus via a communication line (Abstract), comprising:

the plurality of electronic apparatuses (column 12, lines 53-56);

and the management apparatus (column 3, lines 46-51), wherein each of the electronic apparatuses includes:

an abnormality detector configured to detect an abnormality when the abnormality occurs in the electronic apparatuses (column 6, lines 54-53);

an abnormality type determination part configured to determine a type of the abnormality detected by said abnormality detector (column 6, lines 54-63 and column 7, lines 18-24 shows example abnormalities that can be determined); and

an abnormality notification part configured to inform the management apparatus of the abnormality, together with identification information of one or more of the electronic apparatuses in which the abnormality occurs, only when the type of the abnormality determined by said abnormality type determination part represents an abnormality that cannot be eliminated by a user of said one or more of the electronic apparatuses (column 7, lines 50-59 where the printer service depot computer reads on the management apparatus).

But, Yanagawa does not disclose that the abnormality notification part *automatically* informs the external apparatus. Rather in Yanagawa, the operator is given a choice as to whether to inform the external apparatus or not (column 7, lines 50-59 and Fig. 6, label S110).

However, Schroath discloses an abnormality notification part configured to automatically inform an external apparatus of an abnormality (column 5, lines 49-52), thus bypassing the need for operator consent before external notification of any abnormality.

Because both Yanagawa and Schroath disclose methods of detecting and notifications of abnormalities, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute Schroath automatic notification method for Yanagawa's notification with operator consent in order to achieve the predictable result of notifying an external apparatus of an abnormality (which both teachings disclose) so as to eliminate an extraneous step (the pause for operator consent) and decrease the demands placed on the operator.

16. As to claims 17 and 34, they are rejected by the same rationale set forth in claim 1's rejection.

17. As to claim 3, Yanagawa and Schroath disclose the invention substantially with regard to the parent claim 1, and further disclose an electronic apparatus further comprising:

- a non-volatile storage part (Yanagawa, column 13, lines 1-4); and
- an abnormality history writing part for writing history of the abnormality to said non-volatile storage part when the type of the abnormality determined by the

abnormality type determination part represents an abnormality of a fourth type that requires only history saving (Schroath, column 3, line 65-column 4, line 8, if the abnormality only requires history saving nothing further will occur in Schroath's system),

wherein the abnormality type determination part is further configured to determine the type of abnormality as the fourth type that requires only history saving (Schroath, column 3, line 65-column 4, line 8, if the abnormality only requires history saving nothing further will occur in Schroath's system).

18. As to claim 4, Yanagawa and Schroath disclose the invention substantially with regard to the parent claim 1, and further disclose an electronic apparatus further comprising:

an abnormality counter for counting the number of times of occurrence of an abnormality (Schroath, column 4, lines 22-24); and

an abnormality counter controller configured to cause said abnormality counter to up count when the type of the abnormality determined by the abnormality type determination part represents an abnormality of the second type that can be eliminated by the user of the electronic apparatus (Schroath, column 5, lines 24-33),

wherein the abnormality notification part includes means for informing the external apparatus of a corresponding abnormality when a count value of the

abnormality counter reaches a predetermined value (Schroath, column 5, lines 37-52).

19. As to claim 5, Yanagawa and Schroath disclose the invention substantially with regard to the parent claim 4, and further disclose means for displaying occurrence of an abnormality when the count value of the abnormality counter has not reached the predetermined value (Schroath, lines 40-44).

20. As to claim 6, Yanagawa and Schroath disclose the invention substantially with regard to the parent claim 4, and further disclose a reset part resetting the count value of the abnormality counter when the count value thereof reaches the predetermined value (Schroath, column 5, lines 52-56).

21. As to claim 8, Yanagawa and Schroath disclose the invention substantially with regard to the parent claim 4, further disclose means for causing the electronic apparatus to reboot when the count value of the abnormality counter has not reached the predetermined value (Schroath, column 5, lines 37-52).

22. As to claim 9, Yanagawa and Schroath disclose the invention substantially with regard to the parent claim 8, further disclose means for displaying that reboot is to be performed before the electronic apparatus is caused to perform reboot (Schroath, column 3, lines 40-44).

23. As to claims 11, 20, and 37, they are rejected by the same rationale set forth in claim 4's rejection.

24. As to claims 12, 21, and 38, they are rejected by the same rationale set forth in claim 5's rejection.

25. As to claims 13, 22, and 39, they are rejected by the same rationale set forth in claim 6's rejection.

26. As to claims 15, 23, and 41, they are rejected by the same rationale set forth in claim 8's rejection.

27. As to claims 16, 24, and 42, they are rejected by the same rationale set forth in claim 9's rejection.

28. As to claims 19 and 36, they are rejected by the same rationale set forth in claim 3's rejection.

29. Claims 7, 14 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagawa and Schroath as applied to claims 4, 10, and 37 above, and further in view of what was well known in the art at the time of the invention.

30. As to claim 7, Yanagawa and Schroath disclose the invention substantially with regard to the parent claim 4, and further disclose:

an image forming part forming an image on a recording medium (Schroath, column 3, lines 55-56);

a sheet counter counting the number of sheets each having an image thereon formed by said image forming part (Schroath, column 4, 36-38); and

a reset part for resetting the count value of the abnormality counter (Schroath, column 5, lines 49-56).

But, Yanagawa and Schroath do not disclose the sheet counter is used to count the number of sheets that used between detection of errors and if it exceeds a certain value resetting the count value of the abnormality.

However, Official Notice is taken (MPEP 2144.01) that this is an obvious modification for one of ordinary skill in the art at the time of the invention to Schroath's disclosed invention. Schroath discloses determining whether an error has occurred more than Y number of times in X number of minutes, where the value of X is a function of usage data of a printer (i.e., a sheet counter) (column 4, lines 22-56). Simply, cutting out the temporal element of Schroath's controlling variable (X minutes) and making it simply a function of raw usage data would have been an obvious design to choice to one of ordinary skill in the art at the

time of the invention and could have been done in order to simplify Schroath's system.

31. As to claims 14 and 40, they are rejected by the same rationale set forth in claim 7's rejection.

Conclusion

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.
33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2146

34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./
Examiner, Art Unit 2152

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